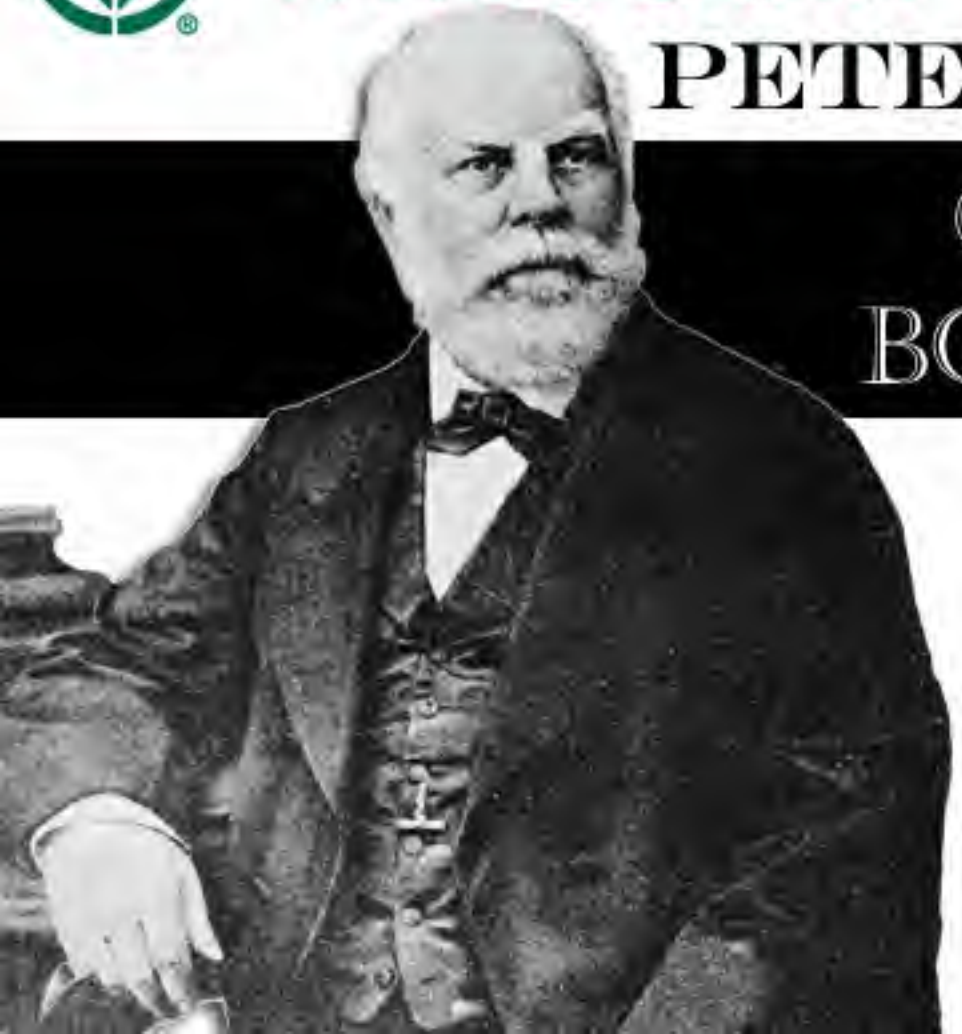
Missouri Botanical Garden
Peter H. Raven Library

George Engelmann Botanical Notebooks



Pagination Note:
Since many of the items lack a specific page number, the page number displayed online refers to the sequentially created number each item was given upon cataloging the materials.

Scrophularia lurida L

Spr II, 786

Ital. Graecia Taurica

Asia minor

N. Saltzwed 1826

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1–2

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Palmae

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Habitus characters of the Palms with fan-
shaped Leaves, Sabal-like Palms

by Hermann Wendland

"Botan Zeitung 7th March 1879
No 10.

I Margin of petioles smooth

A. Leaf more or less bifid

a. bifid to the base, petiole above flat Acanthorrhiza Wendl.

b. bifid to rhachis [middle nerve] of the leaf.

× petiole concave, principal nerves terminating in fibres Sabal Adans

×× petiole flat above, no fibres Colpothrinax Gr. & Wendl

B ~~A~~. Leaf regularly divided within (immediately) the main nerves between lateral and secondary (subordinate) margin of the lobes with smooth acuminate Rhapis L. fil

~~× Leaf rhachis entirely or almost absent~~

C. Leaf regularly divided within the main nerves

a Rhachis entirely or almost absent.

× petiole flat above Trithrinax Mart

×× petiole convex above Thrinax Lin fil.

b. Rhachis entering the blade of the leaf short

× Lobes of leaf with smooth margin. concave above Nannorhops Wendl

×× — — — with spinose margin (Salacia Comm belonging to the Borassineae)

c. Rhachis long extended into the Leaf-blade Pritchardia Seem & Wendl

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S. Watson separates from Brahea and Washingtonia
the Carpentaria californica & Pritchardia Palm
as Erythea armata; The Guadaloupe Island
Palm is his Erythea edulis.
" Genus nearer to Livistona than to Brahea"

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II Margin of petioles spiny.

A. Blade of leaf divided within the secondary nerves (Bahnnerven)

a Divisions plan reaching to the elongated rachis Licuala Thunb.

6. Divisions never reaching the rachis

* Blade elongated rhomboid — Teysmannia Zoll & Reichf.

** — more or less orbicular

† no rachis in leaf

+ Petiole convex above, thorny on margin Chamaerops L

++ — flat — small prickly — Trachycarpus Wall

+++ — concave small prickly — marg. Corypha Lin

†† rachis short in the afflabelate, petioles small-prickly a edges

+ secondary nerves not free along the edges

~~o~~ † Basal margin & main nerves not prickly

o Margins & lanfangles brown woolly
ligula fibrous-divided — Brahea Mart

oo Margins and angles smooth, ligula membranous. — Acoelorrhaphe Wendl a. Gen Mart

++ Basal margins and off the main nerves above small prickly, ligula coriaceous — Copernicia a. Gen Mart

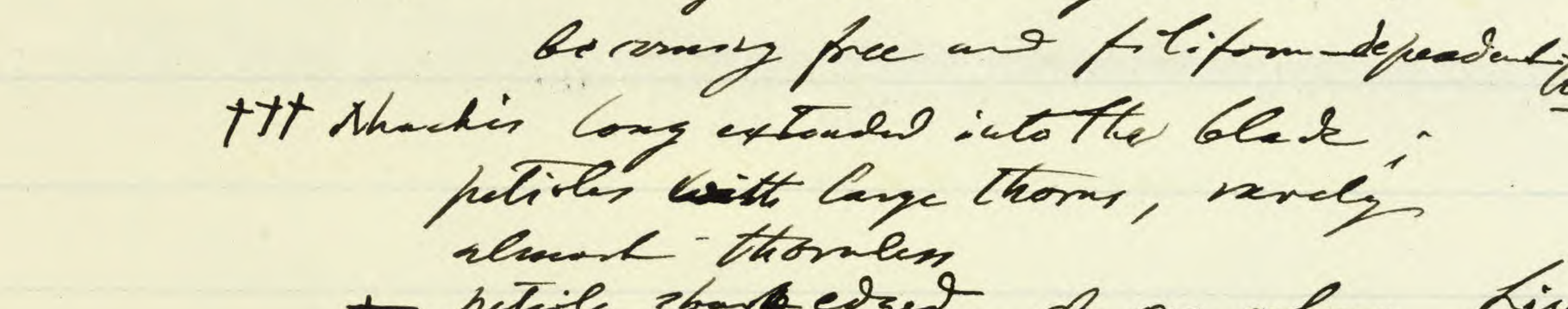
+ + Secondary nerves along the sides becoming free and filiform-pendent — Washingtonia Wendl

††† Rachis long extended into the blade, petioles with large thorns, rarely almost thornless

+ petiole sharp-edged, of one colour — Livistona R Br.

+ + petiole blunt-edged, striped — Pholidocarpus Bl

B Blade of the leaf divided between main and secondary nerves (Bahnnerven); sides each with a main and secondary nerve; petiole thorny in young, sometimes thornless in older plants (Chamaerops Hystrix) — Rhapidophyllum Dr. & Wendl.



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unstead

I found it impossible to arrange the plates with pinnatifid leaves in a satisfactory manner.

Main nerves are those on the upper edge of the leaf folds

secondary (rachis) nerves those on the edge of the folds of the leaves surface

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~~Lonicera~~ Q. Palmeri Jeffrey 1879 Nos

Hemsl. Wrangham finds that most Asian have the 2 ovules developed ovules at the base of the fertile ones [Like White oaks!] about Protobasis and the California Asian have them at top, at the base of the abortive style. But the California Asian (formerly called Basken Asian, then Basken filifera and then Protobasis filifera) shows specific differences, and he now calls it Wrangham filifera flowers thus far unknown.

Fruit oily, small.

In No 10 p. 145 Wrangham publishes a system or key to the knowledge of Subalpine Asian (fifty Asian) according to leaf & petiole. (six not flowering plants)

Chamaerops Hystrix is Rhapidophyllum Hystrix & Wrangham — a very Distinct genus.

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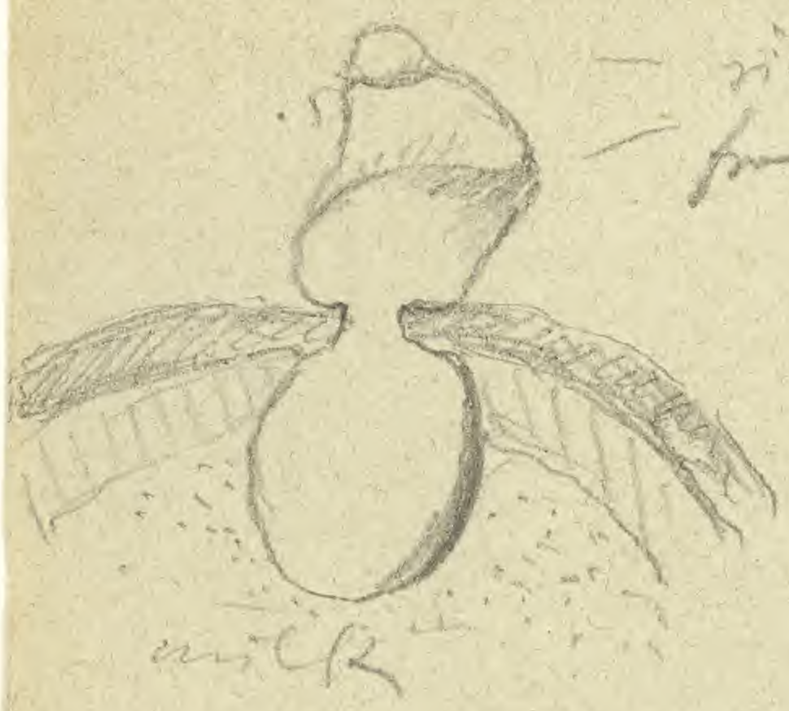
Aug 23 1876

Boss mexicana

— zinc oxide ?
— for shrubbery ?



section of
above X 2

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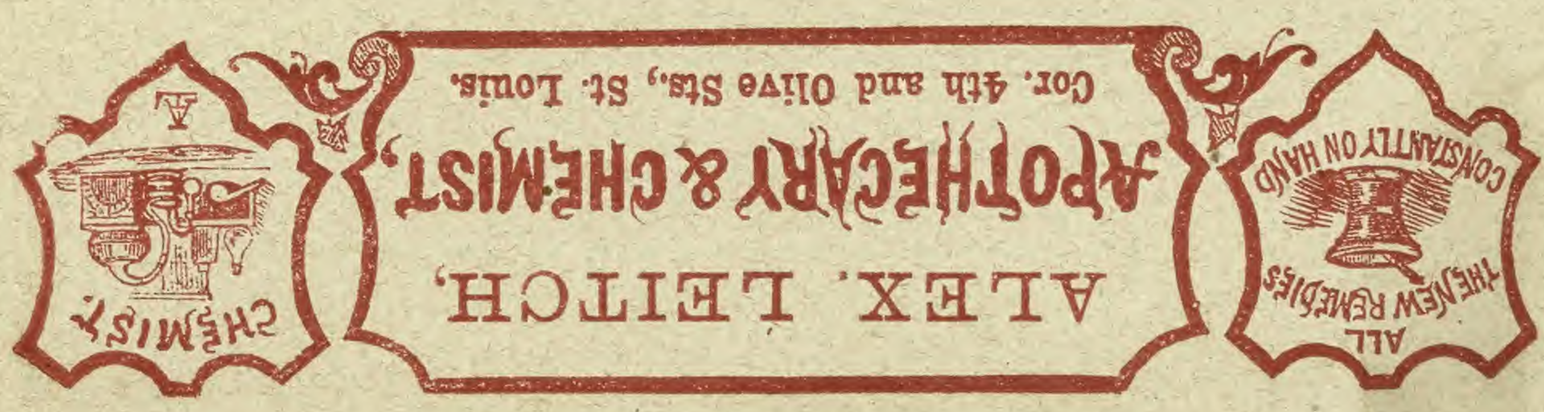

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Sabal (Chamaerops) serrulata Nov 13 1823

Bluffton S. Carol.

S Mellichamps

Lobes of calyx

& filaments

Sect. of fruit, endocarp
black, pulpy, with mucronate
inner surface —
seed pendulous, funiculus large
and curiously shaped

MEDICAL SOCIETY OF SOUTH CAROLINA
CHARLESTON
MUSEUM OF NATURAL HISTORY & PHARMACEUTICAL

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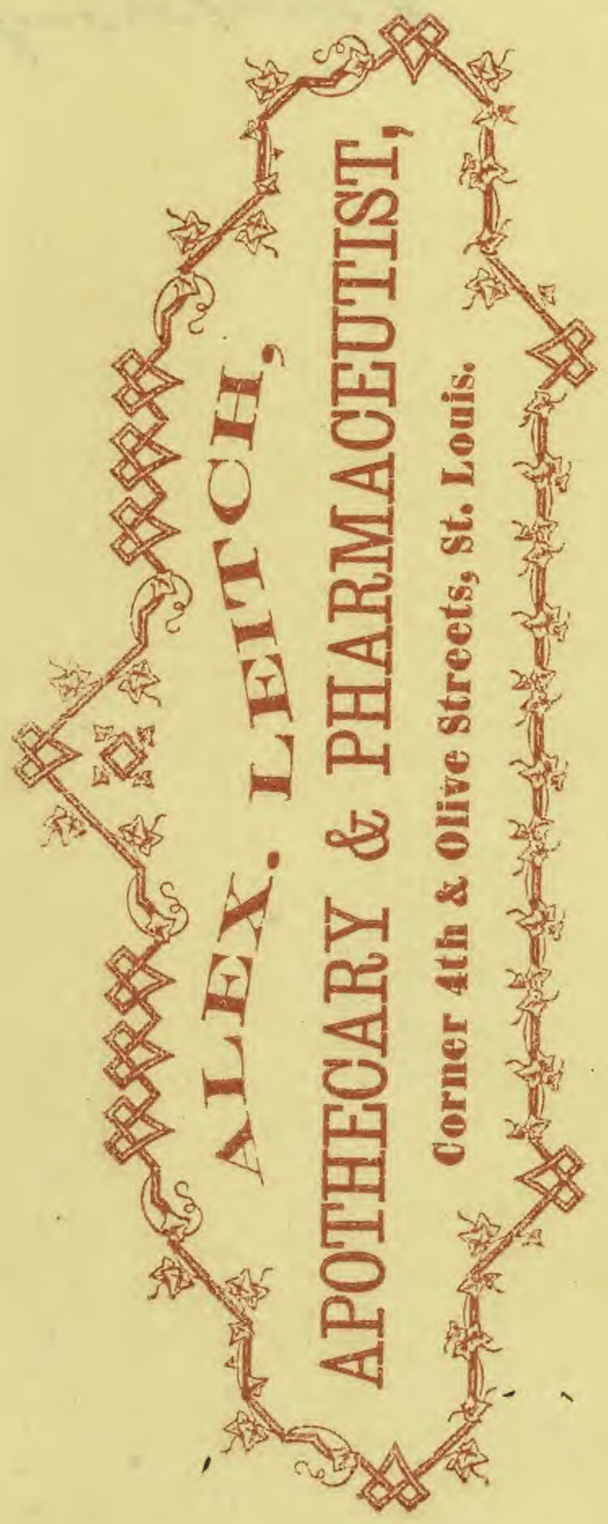

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1-45

Typhaceae

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interrupted descent and ascent took place from January to December, we find in 1862 some interruptions in the steps of that ladder. The electricity in February, 1862, is about four degrees higher than that of January, April somewhat higher than March, and July is the lowest instead of September in 1861. These trifling irregularities may be accounted for by differences in temperature and relative humidity, and by a greater number of thunderstorms in 1862. January of 1862, for instance, was so unusually rainy, that its relative humidity too was unusually high, diminishing thus electricity. But the general features of distribution of electricity throughout the year are apparent in both years, and we may in that respect divide the twelve months of each year into two or three groups. Computing the months which give the highest electricity and those which give the lowest in each year, we find that in both years the months of January, February, March, April, November and December exhibit the highest, and the months of May, June, July, August, September and October the lowest electricity. The first group gives

The aggregate monthly mean of 71.5 degrees of electricity in 1861
and 74.6 " " " 1862
While the second group gives 22.9 " " " 1861
and 25.7 " " " 1862

The se[illegible]

VI. The appearance of negative electricity was connected in

1861. No. times.	1862. No. times.	
30	32	with thunderstorms.
23	28	with rains without thunder and lightning.
20	4	with dry storms (without rain and without thunder and lightning).
4	3	with snow.
1	0	with fog.
78	67	

VII. *Relation of Rain and Snow to Electricity.*

Rain without thunderstorm was accompanied

	By Positive Electricity.		By Negative Electricity.		By no Electricity.	
	In 1861	In 1862.	In 1861	In 1862.	In 1861	In 1862.

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Spergen. natans (Coffee)
(Adams)

White Mts, Lakes, Hb. plum
Canada Hb Mackenzie
Catskill Mts Hb Gray.
Pom Lemontis Catskill Adirondack Hb Engl
White Mts. Hb Torrey

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1st 1867

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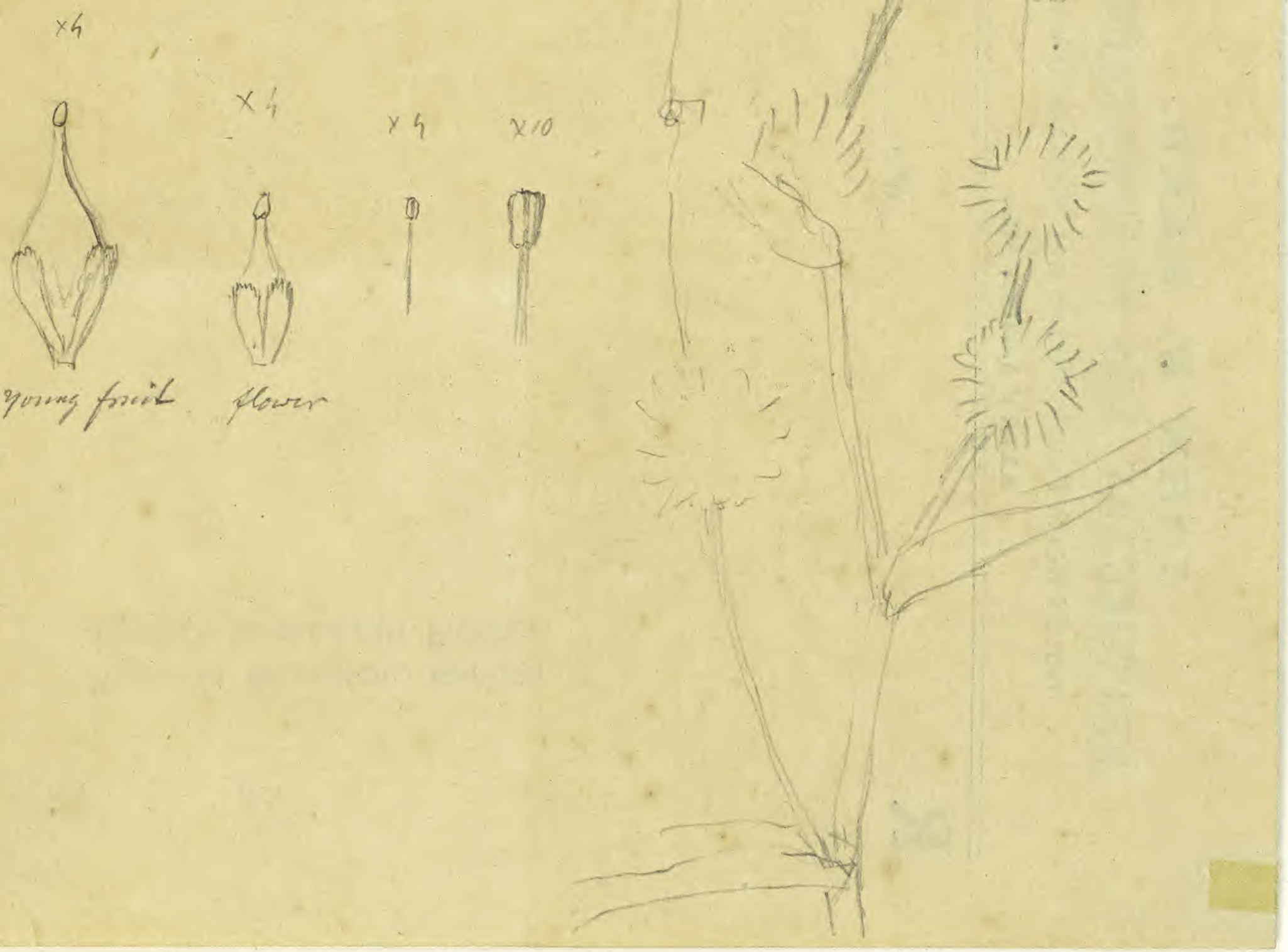
Jan 26 1866

" Spag. natans "

base of White Mountains, Oakes



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JOHN W. REED,

APOTHECARY AND PHARMACEUTIST,

No. 53 North Fourth Street, bet. Pine and Olive,

SAINT LOUIS, MO.

R

No.....

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"Sparg. natans"

Jan 27 1867

Bohemia Leonhardi 1855

x4

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ALEX. LEITCH
APOTHECARY & PHARMACEUTIST
COR. 4TH & OLIVE STS. ST. LOUIS

Jan. 27 1863

" Sparganium natans "

Western New York — ex Herb Gray 1856

x 4

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Specimens exhibited

(Americans)

Albany N.Y. — H.G. Field. H.G. Torr.
Western N. York H.G. Gray.
Newfoundland H.G. Gray H.G. Bell.
Rocky Mtns H.G. Gray. Drummond — H.G. Hook
Minnesota H.G. Torrey
West Coast H.G. Hook

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Wheaton Co. George Co. 7683

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Spary. minimum

Jan 24 1866

×4

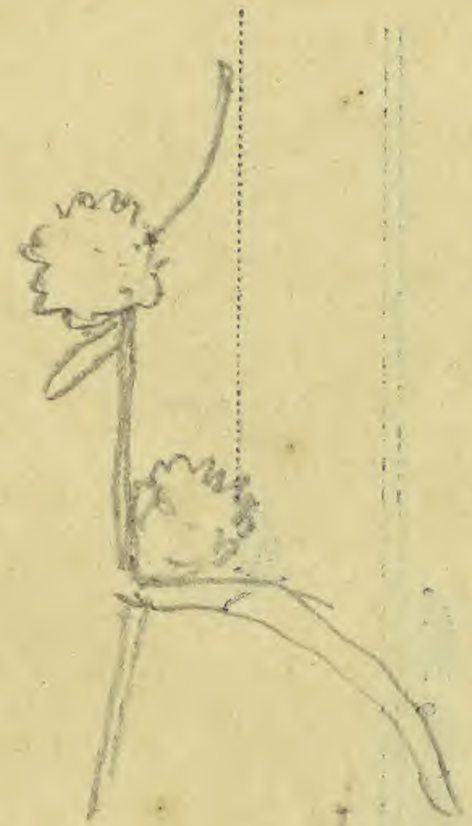
×4

Barbeu

×10

much too large
probably ×6

coral



×4

Jan 27th

A. Barbeu

J. Empleton
1829

first very slightly
constricted

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Spary minimum Bies ! Jan 27 1867

Upsala Bies

x 4

tip usually broken off

Stalk Grooved in middle

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Sparganium Herb Arnd Ohio

Nov 1856

Sp. natans Arnd, minimum Brig

Albany NY & Catskill Mts

Sp. angustifolium Mx. Oakes N Hamp

Sp. erectum Philadelphia!

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Sept 10 1873

Typha latifolia

Dry swamps west of St Louis

Sections of leaf

near Base

1 foot

2 feet

3 feet above Base

Leaf of equal width to near Tip

16-18 mm = 2-3 lines

Knee of Stem

4 feet

5 feet

near Tip

6 feet above Base

seed ×10

fruit ×10

Stigma ×60

base of stipe ×60

epidermis of fruit × 285

hair of perigon × 285

top of seed ×60

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